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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,039	03/18/2004	Tadayuki Sugimoto	09473.0001	5617
22852 7590 03/04/2008 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER PARK, CHAN S	
			ART UNIT 2625	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,039	Applicant(s) SUGIMOTO, TADAYUKI	
	Examiner CHAN S. PARK	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13-18, 25-30 and 37-40 is/are rejected.
- 7) ☒ Claim(s) 7-12, 16, 19-24 and 31-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.


Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/9/06.

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- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims are objected to because of the following informalities:
Claim 1, line 6, "image data" should be -- said image data --;
Claim 1, line 6, "an image" should be -- said image --;
Claim 1, line 10, "an image" should be -- said image --;
Claim 2, line 4, "an image" should be -- said image --;
Claims 4-6, lines 6 & 8, "an image" should be -- said image --;
Claim 37, line 8, "an image" should be -- said image --;
Claim 37, line 12, "an image" should be -- said image --;
Claim 37, line 16, "an image" should be -- said image --;
Claim 38, line 5, "image data" should be -- said image data --;
Claim 38, line 5, "an image" should be -- said image --;
Claim 38, line 8, "an image" should be -- said image --;
Claim 39, line 7, "image data" should be -- said image data --;
Claim 39, line 7, "an image" should be -- said image --; and
Claim 39, line 10, "an image" should be -- said image --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 39 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 39 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

"Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized."

Also, refer to page 53 of the Interim Guideline.

Claim 39, while defining a computer program product, does not define a "computer-readable medium" and is thus non-statutory for that reason. A computer program product can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to state, "A computer-readable medium encoded with a computer program..." in order to make the claim statutory. Also, upon incorporating the limitation recited in claim 40, it will also make the claim statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 13-18, 25-30 and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. U.S. Patent No. 6,661,531 (hereinafter Murphy) in view of Iwami et al. U.S. Patent Application Publication No. 2004/0070672 (hereinafter Iwami).

With respect to claim 1, Murphy discloses an image forming device (printer 14 in fig. 1) for forming an image from image data transferred from a image data storage device (host computer 12 having a memory unit 18 in fig. 1) via an external interface (interface connecting the PC and the printer in fig. 1 & col. 4, line 50) that can be connected to said image data storage device, comprising:

a data size acquiring unit that acquires data size of said image data, for which an image is formed, from said image data storage device (data size sent by the PC in col. 4, lines 33-38 & lines 54-56); and

a calculating unit for calculating transfer completion time required for transferring said image data, for which said image is formed, based on said data size of the image data acquired by said data size acquiring unit (the amount of data to be received in col. 4, lines 54-56) and a speed of transferring data (estimate data rate in col. 4, lines 40-53)

via said external interface (printer calculating the data transfer time in col. 4, lines 54-56).

Murphy, however, does not explicitly disclose that the image data storage device is a portable image data storage device.

Iwami discloses a printer for directly receiving print data from a portable image data storage device such as a digital camera via external interfaces (fig. 5 & paragraph 51).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the image forming device to receive the image data from the digital camera as taught by Iwami.

The suggestion/motivation for doing so would have been to provide a direct communication between the printer and the digital camera for printing images without a host computer (paragraph 6 of Iwami).

Therefore, it would have been obvious to combine Murphy with Iwami to obtain the invention as specified in claim 1.

With respect to claim 2, Murphy discloses the image forming device further calculating: output completion time required for image forming output of the image data, for which said image is formed (calculating print process time in col. 5, lines 25-33).

With respect to claim 3, Murphy discloses the image forming device further comprising: an output setup information receiving unit for receiving output setup information to be set up concerning image forming output condition (unit for receiving user selection of quality settings in col. 5, lines 54-56).

With respect to claim 4, Murphy discloses the image forming device but it does not explicitly disclose a cancellation capability notifying unit for notifying that it is possible to cancel a connection with said image data storage device before the image forming output is completed for said image data, for which an image is formed, after the transfer is completed for said image data, for which an image is formed.

Iwami discloses a cancellation capability notifying unit for notifying that it is possible to cancel a connection with said image data storage device before the image forming output is completed for said image data, for which an image is formed, after the transfer is completed for said image data, for which an image is formed (unit for sending the JobDataDone command for notifying that all job data have been received to the digital camera in paragraph 61 & fig. 13). At the time of the invention, it would have been obvious to one of ordinary skill in the art that this command is a notification to the digital camera that it is possible to cancel the connection between the two devices since it directly causes the digital camera to inform the user to disconnect the connection.

Furthermore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the image forming device of Murphy to include the cancellation capability notifying unit as taught by Iwami.

The suggestion/motivation for doing so would have been to inform the user before the completion of a print process of a digital image that the connection can be disconnected (parapgraph 4 of Iwami).

Therefore, it would have been obvious to combine Murphy with Iwami to obtain the invention as specified in claim 4.

With respect to claims 5 and 6, arguments analogous to those presented for claim 4, are applicable.

With respect to claims 13-18, Iwami discloses that said image data storage device is a digital camera (the printer connected to the digital camera in fig. 5).

With respect to claims 25-30, Murphy discloses that said image data storage device is a recording medium (memory unit 18 in host computer of fig. 1).

Also note that Iwami discloses that said image data storage device is a recording medium (the internal memory storing the digital image in paragraph 48, lines 4-6).

With respect to claims 38-40, arguments analogous to those presented for claim 1, are applicable. Also, please read col. 7, line 65 ~ col. 8, line 9 of Murphy for recognizing the method steps into the computer program instructions executable by the printer processor.

With respect to claim 37, Murphy discloses an image forming system (fig. 1), comprising:

a personal computer (host computer 12); and

an image forming device (printer 14) for forming an image from image data transferred from said PC via an external interface that can be connected to said PC (interface connecting the PC and the printer in fig. 1 & col. 4, line 50);

said PC including:

a transmitting unit for transmitting data size of image data, for which said image is formed, to said image forming device (PC sending the data size according to col. 4, lines 33-38 & lines 54-56);

said image forming device including:

a receiving unit for receiving the data size of the image data, for which said image is formed, from said PC (interface connecting the PC and the printer in fig. 1 & col. 4, line 50); and

a calculation unit for calculating transfer completion time required for transferring said image data, for which said image is formed, based on said data size of the image data received by said receiving unit (the amount of data to be received in col. 4, lines 54-56) and a speed of transferring data (the estimated data rate in col. 4, lines 40-53) via said external interface (printer calculating the data transfer time in col. 4, lines 54-56).

Murphy, however, does not explicitly disclose a digital camera for transmitting data size and image data for printing via the external interface.

Iwami discloses a printer for directly receiving print data from a digital camera via external interfaces (fig. 5 & paragraph 51).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the image forming device to receive the image data from the digital camera as taught by Iwami.

The suggestion/motivation for doing so would have been to provide a direct communication between the printer and the digital camera for printing images without a host computer (paragraph 6 of Iwami).

Therefore, it would have been obvious to combine Murphy with Iwami to obtain the invention as specified in claim 37.

Allowable Subject Matter

4. **Claims 7-12, 19-24 and 31-36** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record do not teach or suggest the claim limitations of the calculating unit for calculating a plurality of transfer completion times corresponding to a plurality of external interfaces and a selecting unit for allowing user to select one of said plurality of external interfaces as an external interface to be used as depicted in fig. 15.

The most relevant prior art lida (JP 2003-076649) teaches the method of transmitting test data for each of the external interfaces to measure the data transfer speed. However, lida does not teach the applicant's claimed unit for calculating a plurality of transfer completion times corresponding to a plurality of external interfaces and a selecting unit for allowing user to select one of said plurality of external interfaces as an external interface to be used.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

csp
February 25, 2008

Chan S. Park
Examiner
Art Unit 2625

